

14 April 1960

TO: L.E.W.

FROM: M.D.R.

SUBJECT: Trip Report - (as per HQ TWX 9273, 7 April 1960)

M.D.R. visited J.S.M. at E.L.G.'s office 12 April 1960.
The following items were discussed:

1. Mechanical Properties of Materials

Values for a Young's modulus, tensile yield strength, tensile break strength, width uniformity, thickness uniformity, weight, splices, and minimum roller dimensions were transmitted. As no advantage could be found in the use of acetate, it was agreed that the base material should be polyester. Based on the method of manufacture, it appears that electrical capacity of the edges will be sufficiently uniform to permit capacity edge-sensing. J.S.M. agreed to provide a value for heat capacity of bulk material.

2. Emulsion Properties

Data on sine wave response and desiccation rate was transmitted. Spectral sensitivity was discussed and to increase the spectral range from a minimum of .7 micron to .75 micron does not appear to be practical. It was agreed that J.S.M. would check the properties and availability of certain developing formulas and that we would continue to investigate the spectral characteristics of filters, transmission and reflecting coats since exposure latitude and spectral response of the complete camera film system will influence the choice of coatings and exposure control mechanisms. We will make a recommendation as to exposure control precision based on exposure latitude, sensitivity processing method, and filter-coating combinations. There does not appear to be any advantage in attempting to modify the spectral character of the anti-halation backing. J.S.M. pointed out that no sensitivity changes were expected, but, until the emulsion stayed on polyester, it could not be guaranteed. J.S.M. agreed to estimate exposure time, and was given a sketch of system to permit this.

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3. Document 128

This document was discussed merely to provide clarification of the technical requirements in the hope that this would simplify the problem of supplying the requested materials. M.D.R. agreed to check the requirement for perforation in items 1 (and 1A) and 2 (and 2A). (This has been done and perforations are not required if the 35mm camera is modified, which is now being accomplished.) The definition of the width for item 3 was discussed in regard to availability of spools on which to put such material. M.D.R. suggested that J.S.M. obtain "C" spools from the depot for this purpose. Item 5 was discussed and J.S.M. pointed out that SO-243 is presently on gray base, but it was agreed that the product really desired was SO-243 type emulsion on thin polyester with the proper anti-halation pelloid backing.

4. Processing

It was recognized that some kind of processing capability would be required at our plant for system test and check out, and it was agreed that a B-5 processor was probably the most appropriate item. Therefore, it is requested that the customer provide such a processor from customer supply.

Milt

Milt

MDR:mb

cc: J.S.M.